

## PATENT ABSTRACTS OF JAPAN

(11)Publication number : 61-070720

(43)Date of publication of application : 11.04.1986

(51)Int.Cl.

H01L 21/30  
G03F 7/20  
H01L 21/302

(21)Application number : 59-191448

(71)Applicant : HITACHI LTD

(22)Date of filing : 14.09.1984

(72)Inventor : IWAYAGI TAKAO

HASEGAWA NOBUO

TANAKA TOSHIHIKO

SHIRAISHI HIROSHI

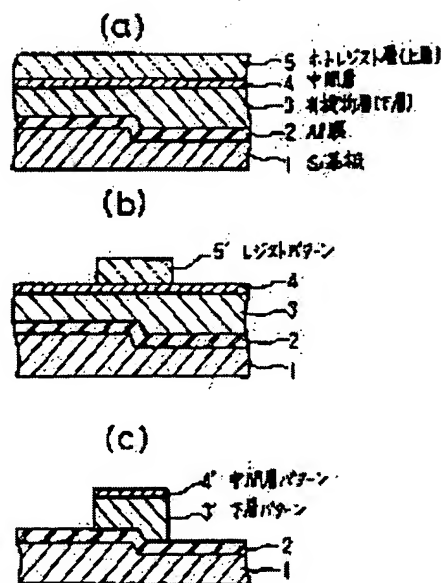
UENO TAKUMI

## (54) METHOD OF FORMING PATTERN

## (57)Abstract:

PURPOSE: To form an ultrafine pattern by containing aromatic bisazide in a lower organic layer, and reducing a light transmission rate used for the exposure of forming a pattern by heating or exposing the full surface.

CONSTITUTION: An aluminum film 2 of a film to be formed is formed on an Si substrate 1 having a step on the surface. An organic layer 3 of the lower layer for flattening the step is formed by using as a polymer polyvinylphenol, as aromatic azide compound 1-(p-azidebenzylidene)-3-( $\alpha$ -hydroxybenzyl)indene(bisazide I) of 20wt% to the polymer, dissolving in a cyclohexane of a solvent, and spin coating it. Then, a silicon compound and positive type photoresist are coated as an intermediate layer 4, a photoresist phase 5 is formed, and the desired resist pattern 5' is formed by a normal photolithographic method. Then, with the pattern 5' as a mask the layer 4 is selectively etched to obtain patterns 3', 4' of accurate dimension and preferable shape.



## LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2000 Japan Patent Office